

095130-0400

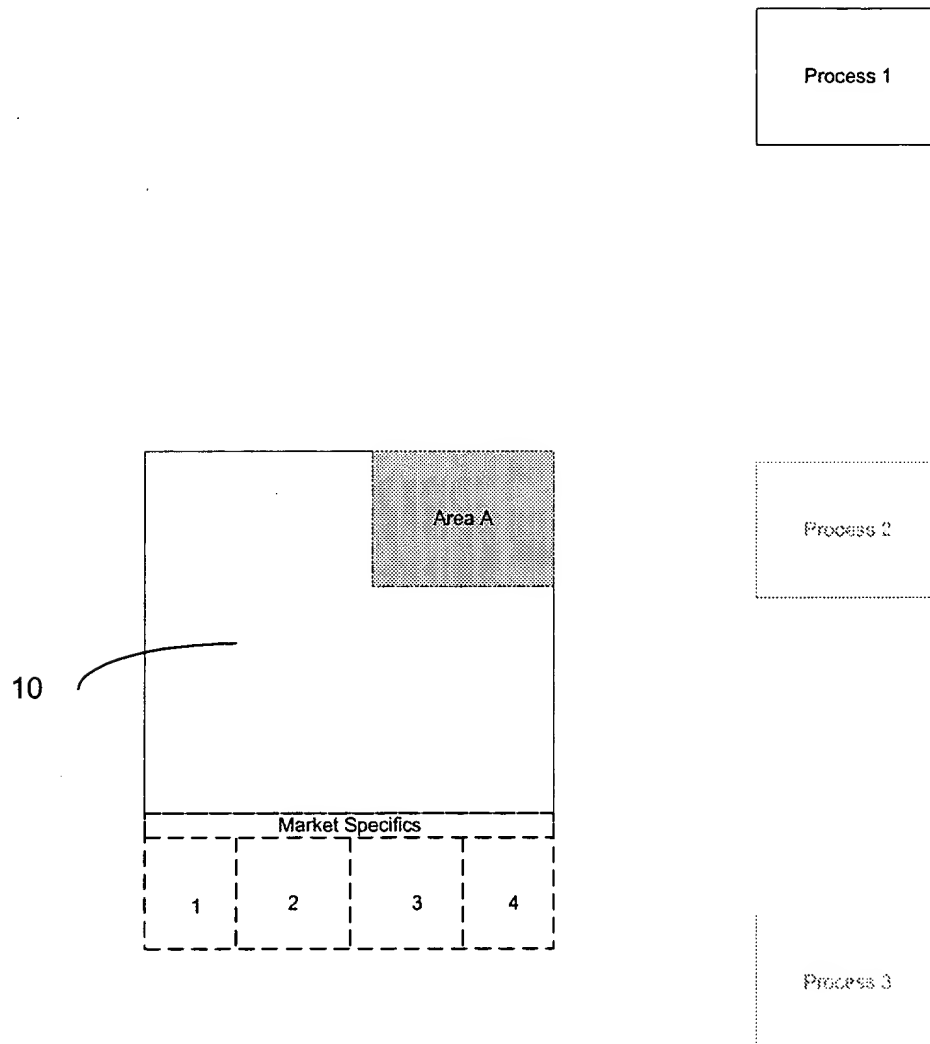


Figure 1

FOOTNOTES

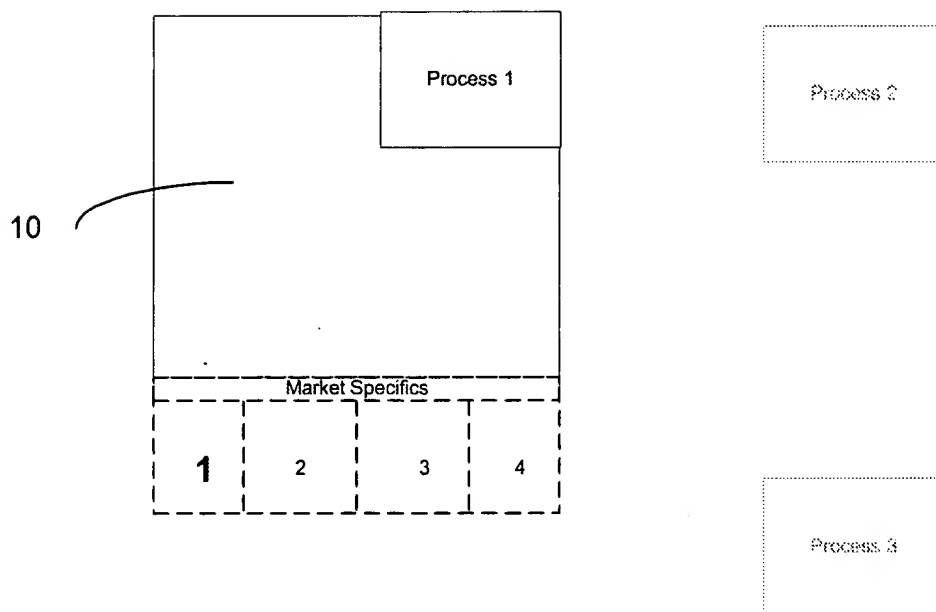


Figure 2

FOUO 40" SET 54860

Administration Tool

File View Server Look'n'Feel Help

Order Tracker Algorithm Configuration Server Monitor

New Expand all Collapse ... Details Fire event Suspend Resume Cancel

all

id	Created	Tag	Algorithm/Type	Side	Instrum...	Price	Quantity	Executed	To execute	% Com...	Susp.
cipher-46											
360	08:57:56		TWVWAP	Buy	AXP		200000.0	63351.0	136649.0	31.68	<input type="checkbox"/>
10680	10:51:56	MarketMaking-66	Limit	Buy	AXP	50.3125	2823.0	523.0	2300.0	18.53	<input type="checkbox"/>
420	09:07:30		TWVWAP	Buy	BUD		88470.0	21838.0	66632.0	24.68	<input type="checkbox"/>
10640	10:51:40	MarketMaking-48	Limit	Buy	BUD	78.875	1187.0	0.0	1187.0	0.0	<input type="checkbox"/>
440	09:08:38		TWVWAP	Buy	MO		247240.0	68292.0	178948.0	27.62	<input type="checkbox"/>
10460	10:49:12	MarketMaking-40	Limit	Buy	MO	28.1875	2899.0	0.0	2899.0	0.0	<input type="checkbox"/>
460	09:09:30		TWVWAP	Buy	UNH		45340.0	10777.0	34563.0	23.77	<input type="checkbox"/>
10660	10:51:50	MarketMaking-57	Limit	Buy	UNH	77.125	360.0	160.0	200.0	44.44	<input type="checkbox"/>
480											
700	09:19:09		TWVWAP	Sell	C		230130.0	72781.0	157349.0	31.63	<input type="checkbox"/>
10520	10:50:00	MarketMaking-68	Limit	Sell	C	60.5	3281.0	0.0	3281.0	0.0	<input type="checkbox"/>
720	09:19:55		TWVWAP	Sell	C		230100.0	74454.0	155646.0	32.36	<input type="checkbox"/>
10530	10:50:00	MarketMaking-69	Limit	Sell	C	60.5	3281.0	0.0	3281.0	0.0	<input type="checkbox"/>
850	09:22:18		TWVWAP	Buy	XOM		13600.0	3715.0	9885.0	27.32	<input type="checkbox"/>
950	09:23:54		TWVWAP	Buy	NOK		188200.0	62228.0	125972.0	33.06	<input type="checkbox"/>
920	09:23:58		TWVWAP	Buy	HON		180100.0	48113.0	131987.0	26.71	<input type="checkbox"/>
10690	10:51:58	MarketMaking-56	Limit	Buy	HON	53.375	1050.0	0.0	1050.0	0.0	<input type="checkbox"/>
10710	10:52:29	MarketMaking-57	Limit	Buy	HON	53.4375	690.0	0.0	690.0	0.0	<input type="checkbox"/>

Figure 3

FOUO 0454260

Administration Tool

Admin Look'n Feel View Help

Order Tracker Algorithm Configuration Server Monitor

Algorithm Context: VWAP

VWAP

New...

Delete

Enabled	Priority	Event	Condition	Action(s)
<input checked="" type="checkbox"/>	3	FixedIntervalTimer(startTime, '3m', finishU...		AheadOrBehind()
<input checked="" type="checkbox"/>	3	OneTimeTimer(finishUpTime)		FinishUp()
<input checked="" type="checkbox"/>	1	UserDefined("wakeup")		AheadOrBehind()
<input checked="" type="checkbox"/>	3	OneTimeTimer(marketOnCloseTime)	context.marketOnCloseQuantil...	PlaceMarketOnCloseOrder("MarketClose"
<input checked="" type="checkbox"/>	3	OneTimeTimer(finishUpTime + '15m')		CloseOrder()
<input checked="" type="checkbox"/>	3	FixedIntervalTimer(today + now + '2m', '5...		RecordStatusOfOrder()
<input checked="" type="checkbox"/>	3	UserDefined("close")		CorrectOrderToMarketOnClose(null)

Add Insert Edit Delete

Apply

Figure 4

FOUO - 04305138

Current state

Property	Expression
currentAPS	35.8833
targetQuantityMax	33848.0
targetQuantityMin	25152.0
currentMarketVWAP	35.8833
targetQuantity	29500.0
targetExtantQuantity	32400.0

Past activity

Time	Id	Algorithm/Type	Su...	Event	Action
12:56:14	cipher-6455...	VWAP	<input type="checkbox"/>	RepetitiveTimer(0)	AheadOrBehind
12:58:14	cipher-6455...	VWAP	<input type="checkbox"/>	RepetitiveTimer(0)	RecordStatusOfOrder
12:59:16	cipher-6455...	VWAP	<input type="checkbox"/>	RepetitiveTimer(1)	AheadOrBehind
13:02:18	cipher-6455...	VWAP	<input type="checkbox"/>	RepetitiveTimer(2)	AheadOrBehind
13:03:16	cipher-6455...	VWAP	<input type="checkbox"/>	RepetitiveTimer(1)	RecordStatusOfOrder
13:05:21	cipher-6455...	VWAP	<input type="checkbox"/>	RepetitiveTimer(3)	AheadOrBehind
13:08:18	cipher-6455...	VWAP	<input type="checkbox"/>	RepetitiveTimer(2)	RecordStatusOfOrder
13:08:23	cipher-6455...	VWAP	<input type="checkbox"/>	RepetitiveTimer(4)	AheadOrBehind

Future activity

Time	Id	Algorithm/Type	Su...	Event	Action
13:47:52	cipher-6455...	VWAP	<input type="checkbox"/>	RepetitiveTimer(17 (18/60))	AheadOrBehind
13:48:34	cipher-6455...	VWAP	<input type="checkbox"/>	RepetitiveTimer(10 (11/30))	RecordStatusOfOrder
13:50:54	cipher-6455...	VWAP	<input type="checkbox"/>	RepetitiveTimer(18 (19/60))	AheadOrBehind
13:53:36	cipher-6455...	VWAP	<input type="checkbox"/>	RepetitiveTimer(11 (12/30))	RecordStatusOfOrder
13:53:56	cipher-6455...	VWAP	<input type="checkbox"/>	RepetitiveTimer(19 (20/60))	AheadOrBehind
13:56:59	cipher-6455...	VWAP	<input type="checkbox"/>	RepetitiveTimer(20 (21/60))	AheadOrBehind
13:58:38	cipher-6455...	VWAP	<input type="checkbox"/>	RepetitiveTimer(12 (13/30))	RecordStatusOfOrder
14:00:01	cipher-6455...	VWAP	<input type="checkbox"/>	RepetitiveTimer(21 (22/60))	AheadOrBehind

Refresh

Ok

Figure 5

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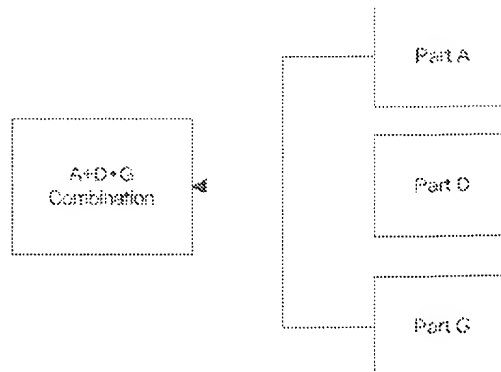
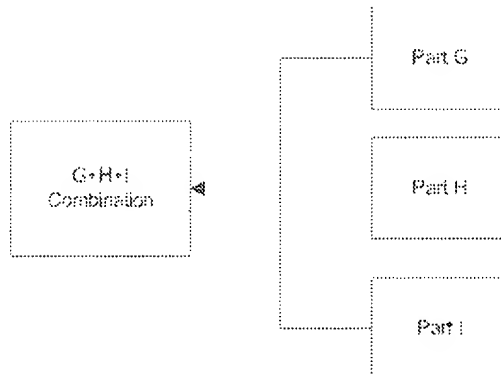
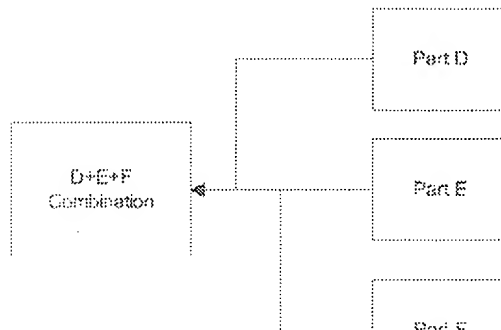
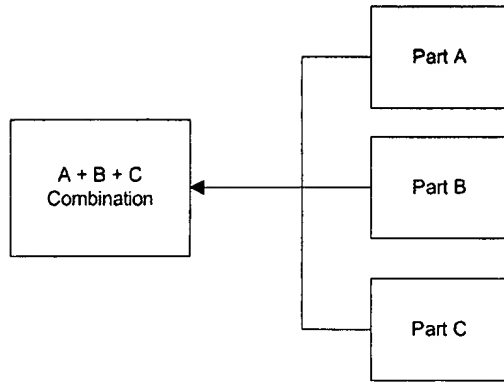
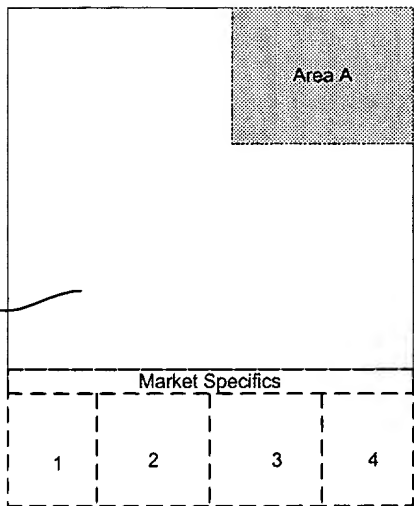


Figure 6

FIGURE 7

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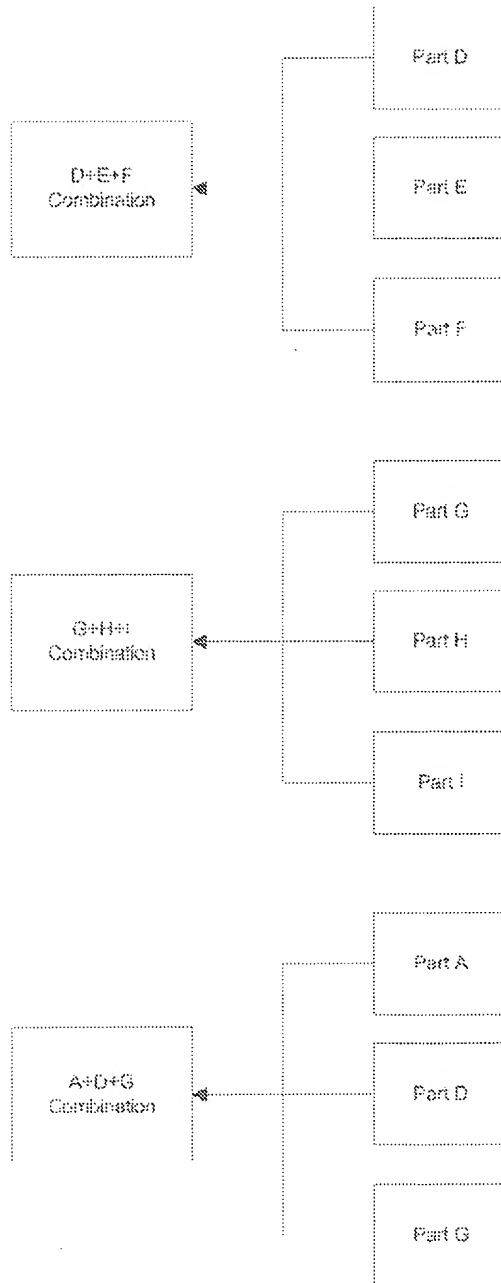
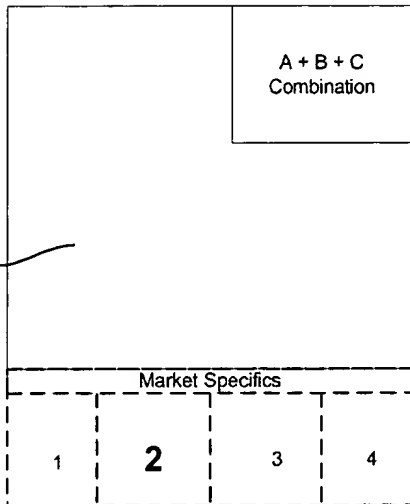


Figure 7

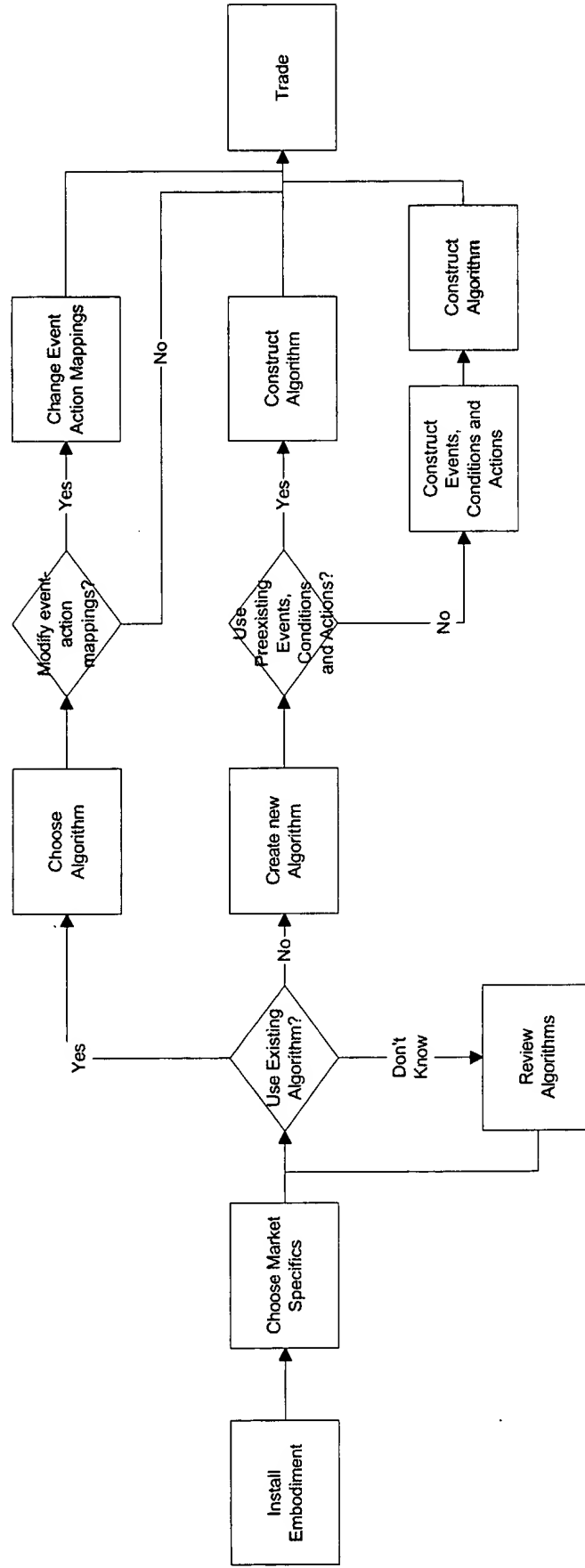


Figure 8

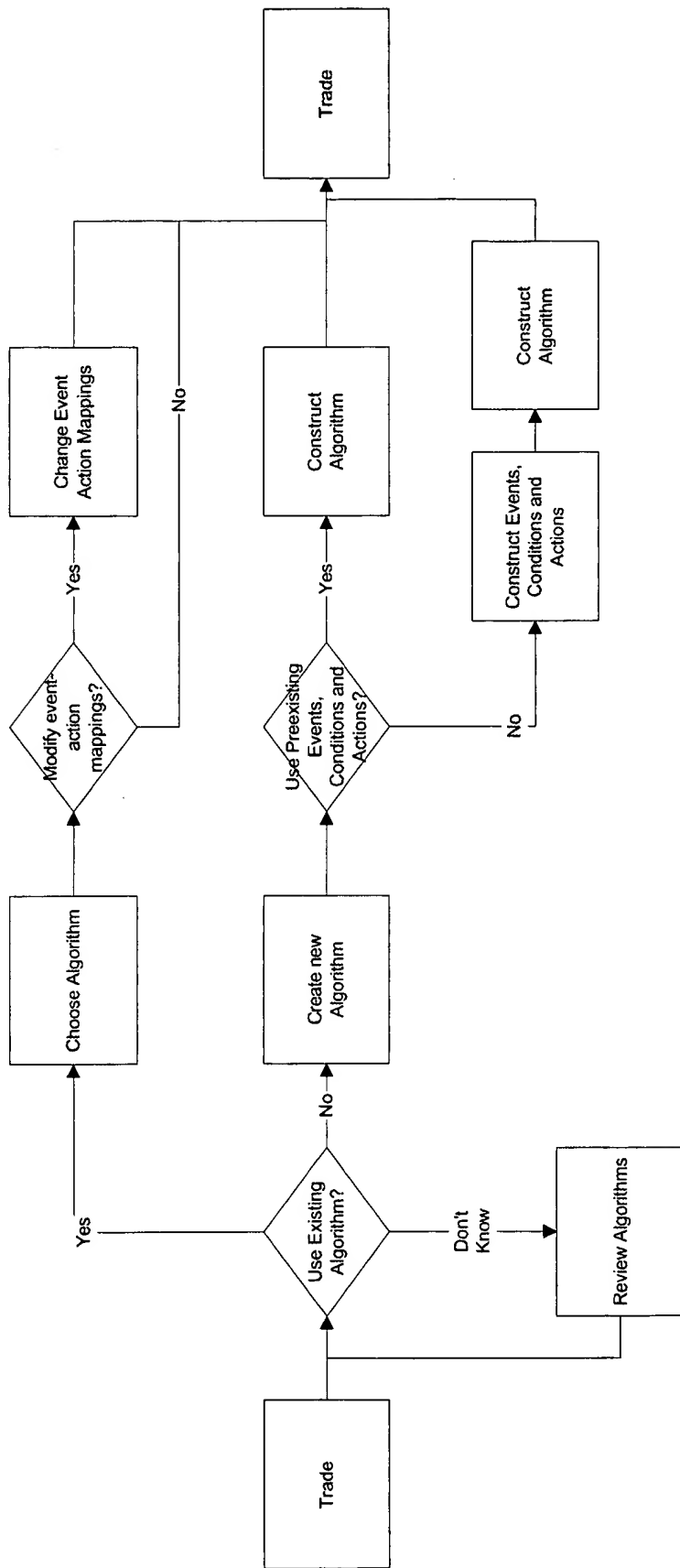


Figure 9

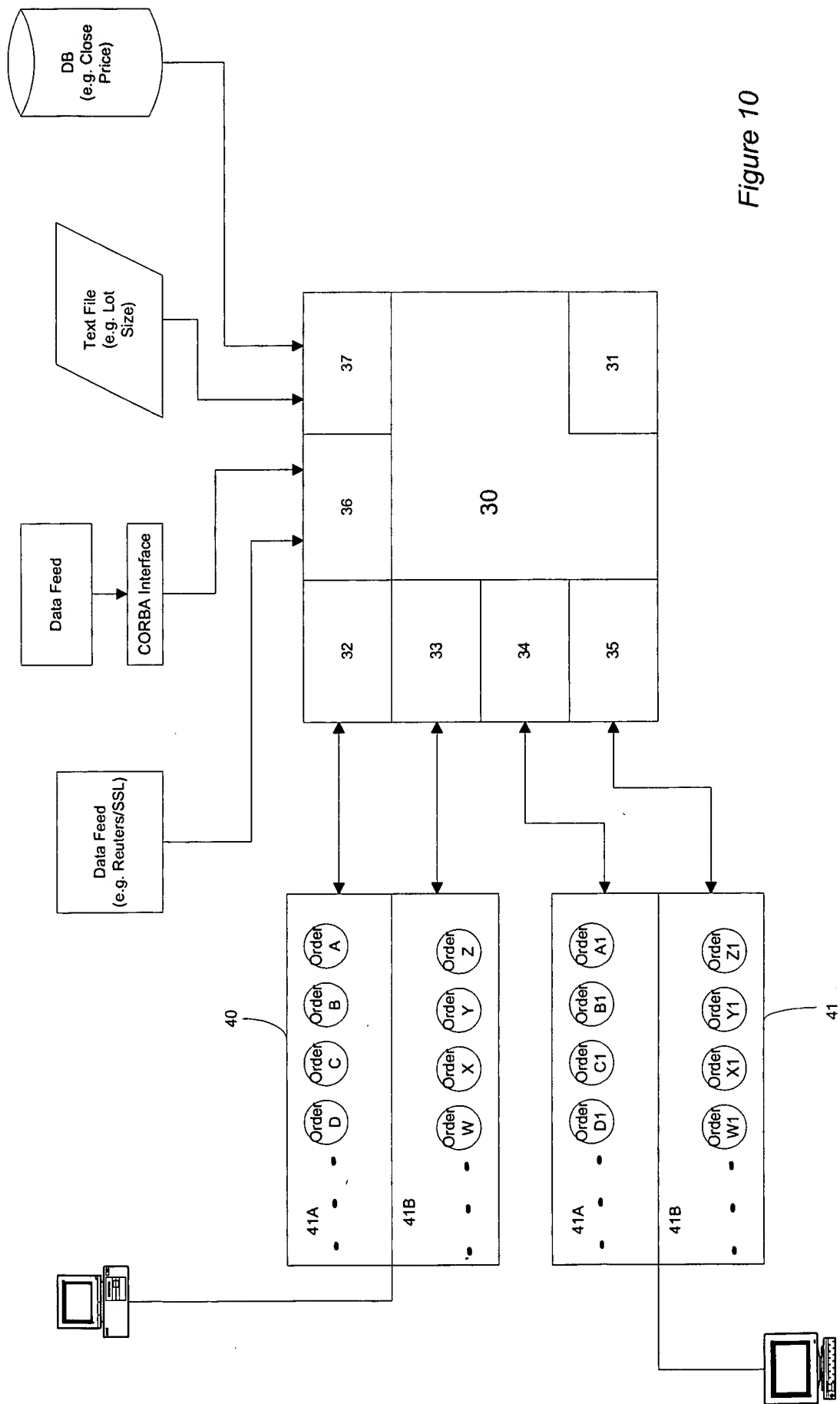


Figure 10